

AGENDA ITEM SUMMARY

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High School Graduates Report
Coordinating Board for Higher Education
April 23, 2009

DESCRIPTION

The Coordinating Board for Higher Education provides an annual report to the State Board of Education detailing the preparation, persistence, and eventual completion / graduation of public high school graduates who enroll at Missouri's public two- and four-year postsecondary institutions. Further background on the history and structure of the report is available in Attachment A. Statewide summary data are detailed below; additional data are included in Attachment B, and trend tables for individual high schools will be posted at <http://www.dhe.mo.gov/hsgradreport.shtml>. The intent of this board item is to provide a summary of the 2009 Missouri High School Graduates Performance Report.

Enrollment and Preparation

Overall enrollment of this cohort continues to grow, by 3.9 percent over the class of 2007, to 25,307 first-time freshmen. A bare majority of the total cohort (50.6 percent) enrolled at public two-year institutions again this year. Further demographic information is available in Attachment B.

As has been the case nationally in recent years, much interest in Missouri has focused on the enrollment of recent high school graduates in remedial coursework. For the class of 2008, we find decreases in enrollments in remedial math coursework, although the total percentage of students enrolled in remediation has increased since 2007:

- Overall: 37.5 percent (2008) compared to 36.6 percent (2007)
- Math: 29.6 percent (2008) compared to 30.1 percent (2007)
- English: 18.0 percent (2008) compared to 17.5 percent (2007)
- Reading: 10.6 percent (2008) compared to 10.2 percent (2007)

Related findings include:

- A decrease in remedial math is encouraging, but this is the second straight year of at least a half-point increase in remedial English/writing enrollment, which contributes to an increase in overall remedial enrollment
- Coursework *and* rigor do make a difference; completion of the CBHE Recommended High School Core Curriculum, four years of math, and achievement of at least the cohort average on the ACT (22.2) all have a dramatic impact on remedial enrollment. Further detail is available in Attachment B.

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- Gaps in student preparation do persist across racial / ethnic groups, but there are also high-performing schools in challenged regions and districts.

To this last point, MDHE staff investigated enrollment in remedial coursework by graduates of schools with high-poverty populations, to identify schools from which enrollment in remediation is below statewide averages. MDHE staff identified high schools in which free and reduced lunch participation was above 50 percent for the 2007-08 school year, which selects approximately a quarter of the state's high schools. Although based on limited data, this analysis spotlights schools at which best practices may be in place which may be transferable to other schools, and, mirrors national interest in identifying similar success stories. The nationally recognized Education Trust, for instance, presents annual "Dispelling the Myth" awards to recognize academic excellence in high-poverty and/or high minority schools.

The following tables identify high schools with at least 25 graduates in the class of 2008 enrolled in public colleges or universities in fall 2008, and from which the percentage of those students enrolled in remedial coursework were below state averages:

High School	Students	Percent Enrolled in Remedial Math
LINCOLN COLLEGE PREP, KANSAS CITY	68	6.6%
CENTRAL R-3 HIGH SCHOOL, PARK HILLS	57	15.8%
CENTRAL HIGH SCHOOL, SPRINGFIELD	72	16.7%
CLEARWATER R-1 HIGH SCHOOL, PIEDMONT	30	16.7%
ELDON HIGH SCHOOL, ELDON	39	20.5%
PIERCE CITY HIGH SCHOOL, PIERCE CITY	33	21.2%
ARCADIA VALLEY HIGH SCHOOL, IRONTON	37	21.6%
DONIPHAN SENIOR HIGH SCHOOL, DONIPHAN	44	22.7%
MCDONALD COUNTY R-I SR HIGH SC, ANDERSON	57	24.6%
SOUTHERN REYNOLDS CO R-II H S, ELLINGTON	26	26.9%
WARSAW HIGH SCHOOL, WARSAW	28	28.6%

High School	Students	Percent Enrolled in Remedial English
LINCOLN COLLEGE PREP, KANSAS CITY	68	1.5%
MCDONALD COUNTY R-I SR HIGH SC, ANDERSON	57	1.8%
ELDON HIGH SCHOOL, ELDON	39	5.1%
ARCADIA VALLEY HIGH SCHOOL, IRONTON	37	5.4%
HICKORY COUNTY R-1 SCHOOL, URBANA	25	12.0%
CENTRAL HIGH SCHOOL, SPRINGFIELD	72	13.9%
CENTRAL R-3 HIGH SCHOOL, PARK HILLS	57	14.0%
WARSAW HIGH SCHOOL, WARSAW	28	17.9%

High School	Students	Percent Enrolled in Remedial Reading
LINCOLN COLLEGE PREP, KANSAS CITY	68	0.0%
MCDONALD COUNTY R-I SR HIGH SC, ANDERSON	57	0.0%
CENTRAL R-3 HIGH SCHOOL, PARK HILLS	57	1.8%
ELDON HIGH SCHOOL, ELDON	39	2.6%
ARCADIA VALLEY HIGH SCHOOL, IRONTON	37	2.7%
PIERCE CITY HIGH SCHOOL, PIERCE CITY	33	3.0%
CLEARWATER R-1 HIGH SCHOOL, PIEDMONT	30	3.3%
SOUTHERN REYNOLDS CO R-II H S, ELLINGTON	26	3.8%
HICKORY COUNTY R-1 SCHOOL, URBANA	25	4.0%
CENTRAL HIGH SCHOOL, SPRINGFIELD	72	4.2%
NEW MADRID CO CENTRAL HIGH SCH, NEW MADRID	34	5.9%
DONIPHAN SENIOR HIGH SCHOOL, DONIPHAN	44	6.8%
MOUNTAIN GROVE HIGH SCHOOL, MOUNTAIN GROVE	40	7.5%
KENNETT HIGH SCHOOL, KENNETT	42	9.5%
MALDEN HIGH SCHOOL, MALDEN	30	10.0%

High School	Students	Percent Enrolled in Remediation
LINCOLN COLLEGE PREP, KANSAS CITY	68	7.4%
CENTRAL HIGH SCHOOL, SPRINGFIELD	72	22.2%
CENTRAL R-3 HIGH SCHOOL, PARK HILLS	57	22.8%
ARCADIA VALLEY HIGH SCHOOL, IRONTON	37	24.3%
ELDON HIGH SCHOOL, ELDON	39	25.6%
MCDONALD COUNTY R-I SR HIGH SC, ANDERSON	57	26.3%
CLEARWATER R-1 HIGH SCHOOL, PIEDMONT	30	30.0%
PIERCE CITY HIGH SCHOOL, PIERCE CITY	33	30.3%
DONIPHAN SENIOR HIGH SCHOOL, DONIPHAN	44	34.1%
WARSAW HIGH SCHOOL, WARSAW	28	35.7%

Of course, practices differ across these schools, and not all will prove transferable, but administrators and staff may be able to share expertise or strategies which may benefit nearby schools. In addition, this analysis illustrates the potential value of further development of linked longitudinal student data systems and value-added research capacity in this area. The MDHE is currently involved in pilot research, funded through the Kauffman Foundation and the National Governor's Association, which is intended to develop a technical and governance framework for the linkages of separate data systems to address persistent P-20 challenges and public policy issues. In addition, conversations have begun which MDHE staff hope will result in the broader participation of Missouri's private colleges and universities in these data systems.

Performance and Retention in College

The report also provides data on the persistence of first-year Missouri public high school graduates who entered Missouri public two- and four-year institutions. Additional data is provided in Attachment B and at <http://www.dhe.mo.gov/hsgradreport.shtml>, but summary highlights include:

- Freshman-to-sophomore (“fall-to-fall”) retention improved by a percentage point overall over the class of 2006. It will be interesting to monitor the extent to which gains in persistence might eventually impact recent declines in graduation rates by this cohort.
- Freshman-to-sophomore retention of African-American and Hispanic students each increased by five percentage points over the 2006 cohort.
- Here as well, completion of four years of math and achievement of an average-or-better ACT score have a clear impact.

Degree Completion

The MDHE also includes reporting here reflecting students’ eventual completion of a two-year degree, a four-year degree, or both. Current data details the completion rates of the public high school graduating class of 2002. General highlights include:

- 48.1 percent of the entering cohort had earned a degree from a Missouri public institution through spring 2008
 - 32.7 percent of fall 2002 degree-seeking freshmen were awarded a baccalaureate degree, 11.4 percent earned an associate’s degree, and 3.9 percent earned both
- The percentage of students enrolled in the public sector through fall 2008 without having apparently completed a degree remained basically stable. Interestingly, the renewal of the federal Higher Education Authorization Act last year required postsecondary institutions to begin reporting graduation rates within “200 percent” time-to-degree, e.g. within *eight* years of first-time enrollment for baccalaureate students. Clearly, there is national interest in monitoring this measure.
- In addition, the tables include the percentage of students who are “out of the public system”. These students did not complete a two- or four-year award from a public institution, and are no longer enrolled in the public sector, but it again bears repeating that data is not yet available which would track these students into private or out-of-state institutions. The percentage of students classified as out of the public system (44.9 percent of the fall 2002 cohort), continued a slight upward trend.

Conclusion

MDHE staff believes that the Missouri High School Graduates Performance Report is one of many useful and informative measures of the preparation, enrollment, persistence, and completion of Missouri’s public high school graduates in public Missouri colleges and universities. The 2008 report would appear to reflect that the overall enrollment of remediation of past-year high school graduates increased slightly this year, but declined a bit in mathematics.

The report may suggest potential strategies in this area; the impact of the 2010 high school graduation requirements and revised CBHE recommended core curriculum will especially merit ongoing analysis. Review of individual high schools' data may also point toward engaged discussion among educators, as well as potential sharing of best practices in instruction, and continued work in alignment of expectations across educational sectors.

In addition, the report continues a trend spotlighted in the 2008 report, in which short-term student retention and long-term completion rates appear to be moving slightly but persistently in different directions. Future reports will illustrate the extent to which improving retention, especially among certain traditionally disadvantaged students, might eventually positively impact completion. In the short term, the timeline reflected in the current six-year graduation rate cohort certainly correlates with increases in remedial enrollment of first-time students, as well as significant increases in average tuition and fees.

Finally, MDHE staff believes that the Missouri High School Graduates Performance Report illustrates the importance of continued development and value-added research of linked longitudinal P-20 data systems in contributing to high-interest public policy discussions. Interagency staff is currently working under the guidance of the statewide P-20 Council to develop governance and technical frameworks for the analysis of linked higher education, K-12, and workforce participation data, and MDHE staff plan additional work with the state's comprehensive independent institutions to enrich postsecondary data and analysis.

STATUTORY REFERENCE

Section 173.750 RSMo, Annual reporting of performance of graduates, furnishing of report – procedure – data included

ATTACHMENTS

Attachment A:	History and Background
Attachment B:	Additional Data

History and Background

Missouri High School Graduates Report

The Missouri High School Graduates Performance Report tracks Missouri public high school graduates entering the state's public two- and four-year postsecondary institutions as first-time freshmen in the fall semester following high school graduation.

In accordance with Section 173.750, RsMO, the Missouri High School Graduates Performance Report should provide information to individual high schools, and should be disaggregated by race and gender. No data identifying individual students should be included. The governing statute is available in its entirety at <http://www.moga.mo.gov/statutes/c100-199/1730000750.htm>. The report should include:

- Grade point average after the initial year in college
- Percent of students returning to college after the first and second semester
- Percent of students taking remedial courses in the basic academic subjects of English, mathematics, or reading
- Other data as determined by rule and regulation of the Coordinating Board for Higher Education

Currently, data comprising the report is drawn solely from student data provided annually by in-state public colleges and universities; no data is currently included in the report from either the state's private institutions, or by the Missouri Department of Elementary and Secondary Education (DESE), although additional collaborative analyses are currently underway.

Missouri High School Graduates Report Additional Data

Enrollment and Preparation

Student Enrollment by Sector, Gender, and Race / Ethnicity, 1996 and 2007-08

	1996	% 1996 Total	2007	% 2007 Total	2008	% 2008 Total	% Change 1996 - 2008	% Change 2007 - 2008
Overall Enrollment	18,110		24,354		25,307		39.7%	3.9%
Four-year	10,768	59.5%	11,810	48.5%	12,498	49.4%	16.1%	5.8%
Two-year	7,342	40.5%	12,544	51.5%	12,809	50.6%	74.5%	2.1%
Women	10,075	55.6%	13,341	54.8%	13,824	54.6%	37.2%	3.6%
Men	8,034	44.4%	11,004	45.2%	11,478	45.4%	42.9%	4.3%
African American	1,422	7.9%	2,454	10.1%	2,693	10.6%	89.4%	9.7%
Hispanic	210	1.2%	448	1.8%	581	2.3%	176.7%	29.7%
Caucasian	15,619	86.2%	18,859	77.4%	20,410	80.6%	30.7%	8.2%
Asian	289	1.6%	391	1.6%	417	1.6%	44.3%	6.6%
Other	570	3.1%	2,202	9.0%	1,206	4.8%	111.6%	-45.2%

Student Enrollment in Remediation by Institutional Admissions Selectivity

Admissions Selectivity	Total Students	Remedial Math	Remedial English	Remedial Reading	Overall
Open	13,347	46.5%	29.0%	18.6%	56.2%
Moderately Sel.	4,610	27.7%	12.8%	4.3%	40.8%
Selective	6,575	0.0%	1.5%	0.0%	1.5%
Highly Selective	775	0.0%	0.0%	0.0%	0.0%

Student Enrollment in Remediation by Gender

Gender	Total Students	Remedial Math	Remedial English	Remedial Reading	Overall
Female	13,824	31.6%	17.4%	11.3%	38.7%
Male	11,478	27.2%	18.8%	9.7%	36.0%

Student Enrollment in Remediation by Race / Ethnicity

Race / Ethnicity	Total Students	Remedial Math	Remedial English	Remedial Reading	Overall
African American	2,693	48.7%	37.6%	35.1%	63.5%
Caucasian	20,410	26.9%	15.1%	7.2%	33.8%
Hispanic	581	32.6%	21.5%	12.2%	40.8%
Asian	417	21.1%	18.9%	7.9%	31.7%
Other / Unknown	1,206	33.6%	21.8%	13.2%	41.7%

Average ACT Composite Score by Race / Ethnicity and Gender

Race / Ethnicity	Female	Male	All
African American	18.3	18.4	18.3
Caucasian	22.4	23.0	22.7
Hispanic	21.6	22.6	22.0
Asian	22.7	23.1	22.9
Other / Unknown	21.3	22.5	21.9
All	21.9	22.6	22.2

Impact of Selected Measures of Preparation on Remedial Enrollment

Race / Ethnicity	Remedial Math	Remedial English	Remedial Reading	Overall
Completed the CBHE Recommended Core	10.9%	5.0%	1.6%	16.4%
Completed the Core and Four Years of Math	2.9%	1.1%	0.7%	3.8%
Achieved an ACT Composite Score of 22 or Better	4.9%	0.7%	0.0%	6.8%

Performance and Retention in College*Student Retention by Gender and Race / Ethnicity, Fall 2007 – Fall 2008*

	Students	Completed Fall 2007	Fall 2007 GPA	Credits Completed (Fall 2007)	Completed Spring 2008	Spring 2008 GPA	Credits Completed (Spring 2008)	Enrolled Fall 2008
Females	13,303	96.9%	2.67	17.5	85.2%	2.76	29.1	76.0%
African American	1,456	96.4%	2.21	11.1	81.0%	2.31	20.3	67.8%
Caucasian	10,250	97.0%	2.75	18.8	86.2%	2.84	30.7	77.9%
Hispanic	246	94.7%	2.58	15.3	86.6%	2.60	26.7	77.2%
Asian	184	98.4%	2.86	18.6	92.4%	2.87	31.3	83.2%
Other / Unknown	1,167	96.2%	2.49	14.5	80.1%	2.63	25.9	68.6%
Males	10,981	96.6%	2.43	16.3	84.0%	2.56	27.7	74.2%
African American	990	95.5%	1.95	10.2	76.4%	2.11	19.5	62.0%
Caucasian	8,560	96.8%	2.50	17.2	85.1%	2.61	28.8	75.8%
Hispanic	200	96.5%	2.35	14.4	81.5%	2.59	25.5	74.0%
Asian	206	96.1%	2.57	17.9	90.3%	2.65	29.8	80.6%
Other / Unknown	1,025	95.7%	2.28	14.2	81.3%	2.47	24.9	71.1%
Grand Total	24,293	96.7%	2.56	17.0	84.6%	2.67	28.5	75.2%

Student Retention by Students with a 22 or Greater Average ACT Composite Score

	Students	Completed Fall 2007	Fall 2007 GPA	Credits Completed (Fall 2007)	Completed Spring 2008	Spring 2008 GPA	Credits Completed (Spring 2008)	Enrolled Fall 2008
African American	257	96.1%	2.60	15.9	92.2%	2.61	27.5	83.3%
Caucasian	8,175	98.0%	3.00	22.0	93.0%	3.03	35.1	88.3%
Hispanic	143	97.9%	2.88	19.5	93.0%	2.87	31.9	86.7%
Asian	183	98.4%	2.95	23.0	95.1%	3.00	36.9	88.5%
Other / Unknown	495	98.2%	2.81	19.9	92.5%	2.86	32.9	85.9%
Grand Total	9,253	97.9%	2.97	21.7	93.0%	3.00	34.8	88.0%

Student Retention by Students who Completed at Least Four Years of High School Math (Students Enrolled at Four-Year Institutions)

	Students	Completed Fall 2007	Fall 2007 GPA	Credits Completed (Fall 2007)	Completed Spring 2008	Spring 2008 GPA	Credits Completed (Spring 2008)	Enrolled Fall 2008
African American	476	98.9%	2.37	13.1	91.4%	2.47	25.1	83.2%
Caucasian	4,137	97.1%	3.01	22.4	95.9%	3.01	36.3	93.1%
Hispanic	86	97.7%	2.97	18.9	97.7%	2.90	32.8	94.2%
Asian	162	98.8%	3.05	22.1	96.9%	3.05	36.7	93.8%
Other / Unknown	230	97.8%	2.84	20.7	93.9%	2.88	34.4	90.4%
Grand Total	5,091	97.3%	2.95	21.4	95.5%	2.96	35.2	92.1%

Degree Completion

Completion by Institutional Admissions Selectivity

Admissions Selectivity	Students	Still Enrolled	Completed Associate's Degree	Completed Baccalaureate Degree	Completed Both	Total Graduated	Out of Public System
Open	9,799	7.2%	21.0%	4.3%	7.0%	32.4%	60.5%
Moderately Sel.	3,879	8.0%	3.1%	47.0%	1.8%	52.0%	40.0%
Selective	5,769	6.3%	2.2%	65.4%	0.6%	68.2%	25.5%
Highly Selective	821	4.0%	1.6%	74.7%	0.7%	77.0%	19.0%
Grand Total	20,268	7.0%	11.4%	32.7%	3.9%	48.1%	44.9%

Completion by Gender and Race / Ethnicity, Fall 2002 through Spring 2008

	Students	Enrolled – Fall 2008	% Completed 2Y Degree	% Completed 4Y Degree	% Completed Both	Total % Completed	“Out of System”
Females	11,282	6.9%	12.7%	34.0%	4.0%	50.6%	42.5%
African American	1,054	10.9%	7.1%	21.3%	1.7%	30.2%	58.9%
Caucasian	9,545	6.3%	13.3%	35.5%	4.2%	53.0%	40.6%
Hispanic	130	7.7%	7.7%	32.3%	3.8%	43.8%	48.5%
Asian	166	11.4%	9.0%	48.8%	2.4%	60.2%	28.3%
Other / Unknown	387	6.7%	14.2%	25.8%	5.2%	45.2%	48.1%
Males	8,977	7.1%	9.9%	31.2%	3.8%	44.9%	48.0%
African American	613	8.5%	4.6%	16.3%	1.0%	21.9%	69.7%
Caucasian	7,779	6.9%	10.4%	32.4%	4.1%	46.9%	46.2%
Hispanic	105	5.7%	6.7%	36.2%	5.7%	48.6%	45.7%
Asian	149	8.7%	7.4%	42.3%	1.3%	51.0%	40.3%
Other / Unknown	331	7.6%	10.3%	25.1%	3.3%	38.7%	53.8%
Grand Total	20,268	7.0%	11.4%	32.7%	3.9%	48.1%	44.9%